



Estimating Department

June 21, 2019

Reference: Slope Stabilization  
TDOT CNT234  
Cumberland County, Tennessee  
UMA Proposal No.: 19-49080

Dear Estimator:

UMA, Geotechnical Construction, Inc. (UMA) is pleased to present the following budget proposal for the above-referenced project. This proposal was prepared to approximate the costs associated with installing and providing the general scope of services associated with the required Tieback Anchors.

Our opinions and statements regarding this proposal and our intended scope of services shall remain confidential to you and shall not be made available to another party without the expressed written consent of UMA. All concepts and procedures stated in this proposal shall be deemed as intellectual property of UMA.

#### SCOPE OF WORK:

UMA proposes to install tieback anchors with shotcrete facing along HWY 70 in Cumberland County as shown on plan sheets drawn by TDOT and dated 5/01/19, 5/22/19, and 5/30/19. UMA has utilized the design assumptions noted on the plans to create a preliminary design. UMA will install soil nails and install the reinforced shotcrete facing. UMA will install formwork utilizing the soil nails and install the secondary wall using cast in place concrete. This will provide a form finish wall that is unstained. UMA will remove the formwork and the GC can begin backfilling operations. UMA has assumed #57 stone will be used for the backfilling. UMA anticipates approximately 4,500 CY of backfill based on current wall geometry.

UMA has included drilling and installing the horizontal drains noted on the plans. UMA has included the minimum shown. UMA will require access to each of the locations with the drill rig. A bench and/or road may be required to access the drilling locations with our drill.

UMA will require a minimum bench width of 20 feet at all drilling locations for staging the equipment. The working bench will need to consist of suitable native site soils or compacted structural fill for supporting our equipment. All lifts must be no more than five feet tall and completed in a timely manner to coordinate with our production.

We are proposing to install the soil nails by open-hole drilling methods utilizing pneumatic drilling methods. If this drilling method is not practical in the field, then UMA reserves the right to modify our costs accordingly. The grading contractor is responsible for shaping the wall face and for any grading, for the working lifts, which may be required to perform the work with our drilling equipment. If survey or location of wall is required during construction, it is to be done by others. We understand there are utilities that may be located in the area of the work/drilling; UMA specifically excludes the location of the wall, utility locating, relocation of any utilities, and location of right of ways or easements.

On site portable water for mixing grout and/or drilling to be provided by general contractor. Clean-up of drill spoils and water containment is the responsibility of the GC. We can discuss the sequence of events upon receipt of the order to proceed.

**ESTIMATED COSTS:**

Item No.	Description	Quantity	Unit	Unit Price	Item Price
01	Mobilization	1	EA	\$ 15,000.00	\$ 15,000.00
02	Soil Nail Reinforcing	45,000	LF	\$ 31.49	\$ 1,417,050.00
03	Reinforced Shotcrete Facing	13,200	SF	\$ 33.00	\$ 435,600.00
04	Secondary Wall (Outer Wall Face)	9,200	SF	\$ 36.50	\$ 335,800.00
05	Horizontal Drains	2,560	LF	\$ 27.50	\$ 70,400.00

\*If not paid by DOT line item, then add to cost of mobilization or wall;

\*\*Installed measured square footage

Additional Item Costs:

- Additional anchor grout over theoretical quantity assuming a 6-inch borehole, if required .....\$ 36.00/CF
- Bond Cost – No bond cost included bond rate is 1.44%
- Hollow Bar for collapsing holes, if required.....\$ 22.50/LF
- Flash coat shotcrete due to sloughing wall face.....\$ 280.00/CY
- Additional shotcrete beyond the theoretical volume plus 20% assuming an 8-inch facing.....\$ 280.00/CY
- Mobilizations, beyond one.....\$ 7,500.00/EA

**CLARIFICATIONS:**

- Mobilization cost is for overall mobilization and design for the project, our carrying cost for start of work and various other items to be born to start this work. Per wall mobilization will be billed for each wall mobilized to.
- UMA has not included the leveling pad, drainage other than drainboard behind our wall(s), or backfilling
- No asphalt work, lane closures, or access has been provided
- Quotation is valid for 3 months after such period UMA reserves right to adjust its pricing
- All lifts must be no more than five feet tall and completed in a timely manner to coordinate with our production.
- UMA has budgeted sufficient time to complete this project as described above. Additional hours/days required, which are the result of circumstances beyond our control, will result in additional charges, such as delays to access for work caused by the grader or relocating utilities or obstructions in the work area.
- All change orders or additional charges will be submitted for the Owners approval prior to the work, no work will done without written authorization. Any revisions to the retaining wall that requires design submittals will incur design charges under a change order.
- Billing is for square footage installed regardless of any embedment or other coverage of portions of the wall
- Retainage will be held no longer than six months after completion of the wall structure regardless of overall job duration
- Actual wall square footage may vary from approved design due to field issues such as cut back etc. Wall square footage will be billed from actual measured wall either over or under the submitted design.
- All grades and wall face cuts are the responsibility of the grader and to be set by General contractor, not by UMA. Deviations from proper grades and cuts that cause excess shotcrete or wall area are not the responsibility of UMA.

**EXCLUSIONS:**

- Demolition and/or repair of any existing pavement or structures
- Site excavation and drill/grout/shotcrete spoil removal/disposal and fill placement
- We exclude providing sanitary facilities for our crews. We have assumed our crews will be allowed to use the onsite facilities.
- Any and all state and federal permits required to perform the above scope of services
- Layout, surveys, field surveying, as-built survey and measurements
- Easements, permits, General Contractors licenses- we are acting as your sub
- Measurements required for site/rig access
- Temporary Casing
- Rock Drilling
- Payment and performance bonds
- Monitoring of the existing conditions, including any pre-construction investigation/photos, during construction
- Liquidated damages
- The working bench in front of the various drilling locations UMA will need a 15 to 20 feet-wide area for drilling machines

**PAYMENT TERMS:**

Based upon a set schedule of work and signed contract of services:

- Materials will be preordered for each wall (such as steel bar) as required for work flow and billed in full upon arrival on site with each wall Mobilization
- Per Contract as agreed, but expected is 45 day pay cycle from submittal of invoice
- Escalation of 3% on unit costs per calendar year is required (excludes any change in cost due to economic changes, trade restrictions, or tariffs)
- General Contractor recognizes and agrees that Subcontractor is a Merit Shop Contractor (non-union), and all services provided by this Subcontract Agreement will be on a Merit Shop basis, which includes Certified Payroll as required. All reference to Labor Agreements, of any kind, mentioned or eluded too, in the Principle Contract or this Subcontract Agreement, are set aside, and not a part of any Subcontract Agreement

Should you have any questions, please call me directly at 336-904-2257.

Respectfully Submitted,  
UMA, Geotechnical Construction, Inc.

Mitch Crayton, P.E. (NC, VA)  
Senior Engineer / Estimating Manager

June 21, 2019

**UMA. GEOTECHNICAL CONSTRUCTION, INC. (UMA) TERMS & CONDITIONS**

The attached proposal is based upon the following conditions, exclusions and requirements in addition to those referenced directly in the above proposal.

1. **EXPIRATION:** Unless specified otherwise, this bid quotation shall not remain in effect after 30-days of the bid date unless accepted in writing or by contract.
2. **PRECEDENCE:** These conditions shall be attached to and become a part of the Contract and shall take precedence over any conflicting provisions.
3. **AMENDMENT:** These general conditions shall not be nullified or superseded except by a subsequent document signed by an authorized representative of UMA.
4. **COMPENSATION:** The total cost, based upon the Scope of Work, will not be exceeded without written approval of the Client.
5. **BILLINGS/PAYMENTS:** Invoice for services will be submitted upon completion of the Work and are due when rendered. Invoice shall be considered PAST DUE if not paid within 30-days after the invoice date. A service charge will be charged at 1.5% (or the legal rate) per month on the unpaid balance. In the event any portion of an account remains unpaid 45-days after billing, the Client shall pay cost of collection, including reasonable attorney's fees.
6. **SCHEDULE & DELAYS:** Time is of the essence in this agreement. Prime Contractor and UMA shall adhere to a mutually agreed upon schedule. If delays occur, other than those caused by "Force Majeure" or UMA, once we have been requested to mobilize, then we require the Prime Contractor to reimburse us for the delays and subsequent downtime. Our delay charges amount to the lesser of: \$5,000.00/Day or \$550.00/Hour
7. **SHOTCRETE OVERAGES:** If additional shotcrete is required due to fault other than UMA e.g. over-excavation or over-blasting, then UMA will invoice for additional yardage required at the above-mentioned additional rate.
8. **GROUT OVERAGES:** UMA has assumed a 20% waste of grout. If additional grout is required due to voids or unforeseen subsurface conditions, then it will be placed at a cost to the Prime Contractor for the above-mentioned additional rate.
9. **ACCESS TO SITE:** Unless otherwise stated, UMA will be provided access to the site by the Prime Contractor for the performance of our proposed services. UMA will take precaution to not damage any existing conditions; however, all existing conditions that are near drilling activities must be protected by the Prime Contractor. Any damages that results from the non-negligent performance of the services will be the responsibility of the Prime Contractor.
10. **HIDDEN CONDITIONS & HAZARDOUS MATERIALS:** A structural condition is hidden if concealed by existing finishes or if it cannot be investigated by reasonable visual observation. If UMA has reason to believe that such a condition may exist, then UMA shall notify the Client who shall authorize and pay for all costs associated with the investigation of such a condition and, if necessary, all costs necessary to correct said condition. If (1) the Client Fails to authorize such investigation or correction after due notification, or (2) UMA has no reason to believe such a condition exists, then the Client is responsible for all risks associated with this conditions, and UMA shall not be responsible for the existing condition nor any resulting damages to persons or property. UMA shall have no responsibility for the discovery, presence, handling, removal, disposal, or exposure of persons to hazardous materials of any form. Please note: undiscovered or unmarked utilities qualify as a hidden conditions and are the responsibility of the Prime Contractor.
11. **INDEMNIFICATION:** The Client shall indemnify and hold harmless UMA and all of its personnel and subcontractors from and against any and all claims, damages, losses, and expenses (including reasonable attorney's fees) arising out of or resulting from the performance of services, provided that any such claims, damages, loss or expense is caused in whole or part by the negligent act or omission and/or strict liability of the Client (except UMA) or anyone for whose acts any of the may be liable. This indemnification shall include any claim, damage or losses due to the presence of hazardous materials.
12. **RISK ALLOCATION:** In recognition of all the relative risks, requires, and benefits of the project to both the Client and UMA, the risks have been allocated so that the Client agrees, to the fullest extent permitted by law, UMA's total liability to the Client for any and all injuries, claims, losses, expenses, damages, or claim expenses arising out of this agreement, from any cause or causes, shall not exceed the total amount of \$1,000,000, the amount of UMA's fee (whichever is greater) or other amount agreed upon when added under Special Conditions. Such causes included, but are not limited to, UMA's negligence, errors, omissions, strict liability, and breach of contract or breach of warranty.
13. **INSURANCE:** UMA shall maintain in place, throughout the performance of its work hereunder, worker's compensation coverage as required by law, and commercial general liability insurance, for bodily injury and property damage coverage (without exclusion for explosion, collapse, and underground loss), with a single occurrence limit of \$1-million. Coverage and the endorsement for additional insured parties shall be limited to UMA's share in the total fault causing the loss or damage on which the claim is based.
14. **TERMINATION OF SERVICES:** Either party may terminate this agreement upon 10 days written notice should the other fail to perform the obligations required hereunder. In the event of termination, the Client shall pay UMA for all services rendered to the date of termination, all reimbursable expenses, and reasonable termination expenses.
15. **OWNERSHIP OF DOCUMENTS:** All documents produced by UMA or its subcontractors under this agreement shall remain the property of UMA and may NOT be used by the Client for any other endeavor without the written consent of UMA.
16. **DISPUTE RESOLUTION:** Any claim or dispute between the Client and UMA shall be submitted to non-binding mediation, subject to the parties agreeing to a mediator(s). The laws of the State of North Carolina shall govern this agreement